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02992317 **Image available**
ACTIVE MATRIX PANEL

PUB. NO.: **01-289917** [JP 1289917 A]

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ABSTRACT

PURPOSE: To obtain a high-accuracy compact and reliable active matrix panel by providing thin film transistors (TR) which constitute a picture element matrix with the same section structure with a P or N type thin film TR.

CONSTITUTION: The picture element matrix 22 includes source lines 26-28 connected to a source line driver circuit 12, gate lines 24 and 25 connected to a gate line driver circuit 21, and picture elements 32 and 33 formed at intersections of the source lines and gate lines. A picture element includes a thin film TR TFT29 and a liquid crystal cell 30, which consists of a picture element electrode and a counter electrode 31. The thin films TR 29 which constitute the picture element matrix 22 have the same section structure with one of P type thin film TRs and N type thin film TRs which constitute a gate line driver circuit and a source line driver circuit. Consequently, the high- accuracy compact and reliable active matrix panel is obtained.

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008076583 **Image available** WPI Acc No: 89-341695/198947 Related WPI Acc No: 94-250787; 94-256791; 94-295914; 97-538775; 97-538776; 97-538777; 98-116219; 98-116220; 98-116221; 98-116222; 98-116223; 98-155368; 98-164764; 98-254300; 99-513494; 99-513495; 99-513496; 99-513497; 99-513498; 99-513499; 99-513500; 99-513501 Active matrix CCD panel for CRT - has drive circuits on common substrate. with each picture element including single thin film transistor Patent Assignee: SEIKO EPSON CORP (SHIH); SEIKO EPSON CO LTD (SHIH) Inventor: MISAWA T; OSHIMA H; HIROYUKI O; TOSHIYUKI M Number of Countries: 008 Number of Patents: 035 Patent Family: Patent No Kind Date Applicat No Kind Date Main IPC Week EP 342925 A 19891123 EP 89304929 A 19890516 198947 B JP **1289917** A 19891121 JP 88119919 A 19880517 199001 US 5250931 A 19931005 US 89351758 A 19890515 G09G-003/20 199341 US 5274279 A 19931228 US 89351758 A 19890515 H03K-019/094 US 92923752 A 19920731 US 5341012 A 19940823 US 89351758 A 19890515 H01L-027/01 US 92923751 A 19920731 199433 EP 342925 B1 19941228 EP 89304929 A 19890516 G02F-001/133 199505 DE 68920200 E 19950209 DE 620200 A 19890516 G02F-001/133 199511 EP 89304929 A 19890516 KR 9409074 B1 19940929 KR 895609 A 19890428 G02F-001/133 199635 KR 9410107 B1 19941021 KR 8911609 A 19890428 G02F-001/133 199637 KR 9504739 B1 19950506 KR 895609 A 19890428 G02F-001/136 199702 KR 9411607 A 19940525 US 5583347 A 19961210 US 89351758 A 19890515 H01L-029/786

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Priority Applications (No Type Date): JP 88119919 A 19880517; JP 9725682 A

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Cited Patents: Jnl.Ref; A3...9036; EP 239958; GB 2070857; No-SR.Pub; 00 3Jnl.Re

Patent Details:

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Designated States (Regional): FR GB NL

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Designated States (Regional): DE FR GB NL

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Abstract (Basic): EP 342925 A

A liquid crystal display having an active matrix panel consisting of a picture element matrix (22) mounted on a transparent substrate also includes multiple gate lines (24), multiple source lines (26) and multiple picture elements (33) including a thin film transistor. A gate line drive circuit (21) and a source line drive circuit (12) each comprise multiple thin film transistors all mounted on the transparent substrate.

The thin film transistors of the picture element matrix have a similar cross sectional structure to certain of the thin film transistors of the one of the gate line drive circuit and the source line drive circuit.

ADVANTAGE - Small and lightweight electronic viewfinder has extremely high resolution with a colour filter and low power consumption. Increased CRT flexibility.

Dwg.1/19

Title Terms: ACTIVE; MATRIX; CCD; PANEL; CRT; DRIVE; CIRCUIT; COMMON;

SUBSTRATE; PICTURE; ELEMENT; SINGLE; THIN; FILM; TRANSISTOR

Derwent Class: L03; P81; P85; U12; U14

International Patent Class (Main): G02F-001/133; G02F-001/136; G09G-

003/20; G09G-003/36; H01L-021/336; H01L-027/01; H01L-027/12; H01L-

027/13; H01L-029/41; H01L-029/786; H03K-019/094

International Patent Class (Additional): G02F-001/13; G02F-001/1345;

G02F-001/137; G09F-009/00; G09F-009/30; G09F-009/33; G09G-005/00;

H01L-021/84; H01L-023/528; H01L-023/535; H01L-027/02; H01L-

029/78; H01L-031/0392; H03K-017/84

File Segment: CPI; EPI; EngPI